

APPENDIX 2.7

June 2, 2011 Public Meeting Agenda, Press Release, and Handouts

June 2, 2011 Public Meeting

A public meeting was held June 2, 2011 at the Air Pollution Control Board. The focus of the Public Meeting was to introduce the Draft Plan and request review and comment from the public and local stakeholders. LOJIC maps were displayed at the Public Meeting to showcase the Risk Assessments for the 13 hazards.

Attendees received a folder with the following inside: a copy on CD of the Draft Plan, the Press Release with instructions on how to comment on the Plan, agenda, Advisory Committee members, Project Staff contact list, and an Executive Summary for the Plan. Following are the handouts.



Louisville Metro Multi-Hazards Mitigation Plan

Air Pollution Control Board

June 2, 2011

4:00 – 6:00 p.m.

Public Meeting Agenda

Please sign-in. Pick-up CD of the draft Multi-Hazards Mitigation Plan

4:00 – 4:30 p.m.

Registration and View Maps

Photo Op/Press for Draft Plan

4:30 p.m.

Welcome & Project Staff Introductions

Bob Smith, Louisville Metro Multi-Hazards Advisory Committee Chair

Five-Year Update, Louisville Metro's Planning Process

Pamela Moore, Project Staff

Risk Assessment for Natural Hazards and Hazardous-Materials

Josh Human, Project Staff

Flood Hazard in 11 Watersheds

David Johnson, Project Staff

Mitigation and the Five-Year Action Plan

Pamela Moore, Project Staff

How to Comment, Next Steps for FEMA, State and Local Approval

Bob Smith

Open Discussion

Louisville Metro Vulnerable to 13 Hazards

Dam / Levee Failure
Drought
Earthquake
Extreme Heat
Flooding
Hailstorms
Hazardous-Materials
Karst / Sinkholes
Landslides
Thunderstorms / Lightning
Tornados
Wildfire
Winter Storms

Project Staff available to discuss maps and take additional comment





YOU ARE INVITED TO ATTEND



PUBLIC MEETING ON JUNE 2

LOUISVILLE METRO PRESENTS FIVE-YEAR UPDATE FOR THE MULTI-HAZARD MITIGATION PLANNING EFFORT

The Louisville Metro Emergency Management Agency (EMA), in partnership with the Louisville/Jefferson County Metropolitan Sewer District (MSD) and LOJIC, is seeking public comment on the Draft Multi-Hazard Mitigation Plan.

The plan, updated every five years, is required under federal law to help communities to better prepare for natural and hazardous-materials disaster events and establishes eligibility for federal grants to support hazard mitigation planning efforts.

Louisville Metro has been determined to be vulnerable to 13 distinct hazards. The plan identifies these hazards and outlines specific actions for mitigation. The planning process, which began over a year ago, has been led by an advisory committee made up of over 60 local agencies, organizations, and citizen stakeholders. Presentations and handouts at the public meeting will explain how the planning process has evolved over the last year.

The meeting will be held at the

Air Pollution Control Board

850 Barret Avenue

June 2, 2011

4:00 to 6:00 pm.

To review the Plan, go to Louisville Metro Emergency Management Agency (EMA) website:
<http://louisvilleky.gov/EMA/Multi-Hazards+Mitigation/>

You can also review the 2011 Multi-Hazard Mitigation Plan at the following three locations:

Louisville Metro EMA

410 South 5th Street, 3rd Floor

Louisville/Jefferson County MSD

700 West Liberty Street

Louisville Free Public Library

301 York Street

Comments due by June 12, 2011

To Provide Comment or for More Information Contact:

Jim McKinney, Louisville Metro EMA

(502) 572-3458, Jim.McKinney@louisvilleky.gov



Louisville Metro Multi-Hazards Mitigation Plan

Advisory Committee Representatives

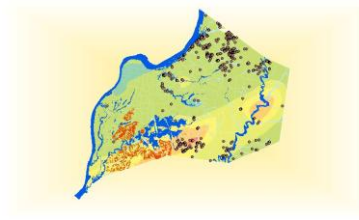
Advisory Committee Representatives
Air Pollution Control District (APCB)
AMEC Earth and Environmental *
American Red Cross (ARC)
Anchorage Representative *
BA Engineers *
Baptist Hospital East (BHE) *
Bellarmine University *
Churchill Downs *
Citizens
Downtown Development
Ford Kentucky Truck Plant *
Ford Louisville Assembly *
Home Builders Association of Louisville (HBAL)
HOSPRUS -Hospice of Louisville
Jefferson County Property Valuation Administrator (PVA)
Jefferson County Public Schools (JCPS)
Jeffersontown Representative *
Jewish Hospital & St. Mary's HealthCare (JHSMH) *
Kentucky Community & Technical College System (KCTCS) *
Kentucky Department of Public Health (KyDPH)
Kentucky Division of Emergency Management (KyEM)
Kentucky Division of Emergency Management local Area
Kentucky Division of Water (KDOW)
Kentucky Geological Survey (KGS)
Kentucky Volunteer Organizations Active in Disaster (VOAD)
KIPDA, Area Development District
Louisville & Jefferson County MSD
Louisville & Jefferson County MSD Haz-Mat *
Louisville Fire & Rescue
Louisville Gas & Electric Co. (LG&E)
Louisville Metro Department of Codes & Regulations (C&R)
Louisville Metro EMS (LMEMS)
Louisville Metro Government Public Works and Assets
Louisville Metro Parks
Louisville Metro Planning & Design Services (PDS)
Louisville Metro Police Dept (LMPD)
Louisville Metro Public Health & Wellness
Louisville Regional Airport Authority *
Louisville Water Co (LWC)
Louisville/Jefferson County EMA Haz-Mat *

Advisory Committee Representatives
Medical Reserve Corp. (MRC)
Metro United Way
MetroCall
Metropolitan Medical Response System (MMRS) *
National Weather Service (NWS)
Norton Healthcare *
Samaritan Global *
Southern Baptist KY Disaster Relief *
Spalding University *
St Matthews Representative *
Suburban Fire Districts
TARC
TRIMARC
United Parcel Service (UPS) Airlines *
University of Louisville (U of L)
University of Louisville Hospital
University of Louisville, Center for Hazards Research
URS Corporation
<i>* New members to the Advisory Committee for the updated Plan</i>

Louisville Metro

Multi-Hazards Mitigation Plan

Five-Year Update



DRAFT Executive Summary

As a local community, Louisville Metro is required to develop a comprehensive Natural Hazards Mitigation Plan. The Disaster Mitigation Act of 2000 (DMA 2000) provides the legal basis for Federal Emergency Management Agency (FEMA) mitigation planning requirements for State, Local and Indian Tribal governments as a condition of mitigation grant assistance. DMA 2000 is a regulation to improve the hazard mitigation planning process in the United States.

DMA 2000 requires local communities to address natural hazards in their community with a focus on “pre-disaster mitigation” rather than “post-disaster responses.” The legislation reinforces the importance of mitigation planning in emphasizing planning for disasters before they occur. As such, DMA 2000 establishes a “pre-disaster hazard mitigation” program and new requirements for the post-disaster Hazard Mitigation Grant Program (HMGP).

Five Year Update: DMA 2000 also requires local communities to update the Hazards Mitigation Plan on a five-year cycle. The 2011 Louisville Metro Mitigation Plan follows guidance issued by the FEMA and the Community Rating System (CRS). The Plan update includes Hazardous Materials (Haz-Mat) as a Man-Made Hazard. As a result, the Louisville Metro Plan became a Multi-Hazard Plan.

Disaster Mitigation Act of 2000

The DMA 2000 is intended to facilitate cooperation between state and local authorities as it encourages and rewards local, tribal, and state pre-disaster planning and promotes sustainability as a strategy for disaster resistance. This enhanced planning network better enables local and state governments to articulate their needs for mitigation, resulting in faster allocation of funding, and more effective risk reduction projects. As a result, communities must have an approved mitigation plan in place before receiving HMGP funds.

Summary of the Benefits of Mitigation Planning

- Leads to cost-effective selection of risk reduction actions
- Builds Partnerships
- Contributes to sustainable communities
- Establishes funding profiles



Louisville Metro **DRAFT** Multi-Hazards Mitigation Plan

Five-Year Update

April 15 2011

Due to Louisville Metro's climate, geology, and geographical setting, the area is vulnerable to 12 natural hazards that threaten life and property. Flooding consistently ranks as the number one natural hazard in the Louisville Metro area due to its proximity to the Ohio River, 11 major stream systems and approximately 790 stream miles. The elevation in Louisville Metro ranges from 383 to 902 feet above sea level and estimations show that 15% of the area is in the floodplain.

The objective of the updated five-year Plan is to produce a mitigation plan with a program of activities to further identify Louisville Metro's vulnerability to natural and man-made hazards so a mitigation strategy can be developed to eliminate or reduce losses. The updated Plan uses the same planning process as the 2005 plan and stakeholders are again at the center of the process.

Planning Partners: The Louisville Metro Emergency Management Agency (EMA) is primarily responsible for the coordination and development of the local Multi-Hazard Mitigation Plan. Collaborating with EMA on the Plan are both the Louisville & Jefferson County Metropolitan Sewer District (MSD) and Louisville/Jefferson County Information Consortium (LOJIC). Utilizing a tiered-planning process, Project Staff worked closely with a stakeholder Advisory Committee throughout the planning process.

The Advisory Committee includes a cross-section of the community with over 60 agencies / organizations. The existing Louisville Metro Natural Hazards Mitigation Plan members, as well as others, were requested to serve as public and private stakeholders for the five-year Plan update. New members were added to the Advisory Committee to address man-made hazards and to provide citizen input. The Advisory Committee represents hazard-related agencies/organizations from local, state, and federal agencies, as well as community representatives, local business leaders, academia, government, businesses, public health and hospitals, neighborhoods, citizens, and volunteer/public service organizations. The Advisory Committee also is composed of staff from those community departments that will be implementing the majority of the plan's recommendations. In total, the Advisory Committee attended 12 meetings and two public meetings at the beginning and the end of the process.

A Partnering Agreement and Resolution that shows early support of the Plan from Louisville Metro's governing body and Advisory Committee is included in the Plan. The Partnering Agreement includes the Mission Statement, signatures, and states the commitment to the planning process by the Advisory Committee.

Louisville Metro's planning process provides an opportunity for the public to comment on the plan during its formation as well as an opportunity for any neighboring communities, local and regional agencies, businesses, and other interested parties to participate in the planning process. Public involvement includes public meetings, one-on-one interviews by Project Staff, phone interviews, and contact with various officials from Metro offices, and State and Federal

Louisville Metro Vulnerable 12 Natural Hazards

- Dam Failure
- Drought
- Earthquake
- Extreme Heat
- Flooding
- Hailstorms
- Karst / Sinkholes
- Landslides
- Thunderstorms / Lightning
- Tornados
- Wildfire
- Winter Storms





Louisville Metro **DRAFT** Multi-Hazards Mitigation Plan

Five-Year Update

April 15 2011

agencies. In total, the Advisory Committee attended 12 meetings and two public meetings at the beginning and the end of the process.

Plan Update Outline: During the five-year update planning process, areas at-risk in Louisville Metro were identified, mapped, assessed, and vulnerabilities determined so that an appropriate mitigation strategy could be developed for multi-hazards. The Plan reviews historic data, assesses vulnerability to future potential disasters, reviews development trends and current landuses, and develops a mitigation strategy to reduce the affects of disasters. This mitigation plan is based upon the best available data and provides a blueprint for reducing the potential losses identified in the risk assessments.

Risk Assessment: The hazard identification section in the Plan identifies the 13 hazards (12 natural hazards plus hazardous materials) likely to affect the Louisville Metro area and outlines historical record of damage and disaster declarations. The individual risk assessment sections for all 13 hazards provide a comprehensive overview. Hazard profiles provide a description on the potential impacts and the probability and magnitude for each identified hazard. The profiles also focus on severity and resulting affects on transportation, safety, and economics.

Throughout the Risk Assessment, maps are used whenever possible to convey where the spatial data and at-risk areas are located. Maps provide an invaluable Geographic Information Systems (GIS) visual tool for analysis and are a key component for communication with the Advisory Committee, Metro Council, and at public meetings.

Hazard Ranking and Risk

Matrix: The Risk Matrix shown here provides a qualitative assessment of various hazards that could occur. The extent of the hazard risk gauge ranges from yellow, indicating moderate, to red, indicating severe risk.



RISK	HAZARDS
Severe Risk Hazards	Dam Failure Flood Haz/Mat Severe Storm Severe Winter Storm Tornado
High Risk Hazards	Hail Karst/Sinkhole
Moderate Risk Hazards	Drought Earthquake Extreme Heat Landslide Wildfire

Identifying Assets: Information used to identify the assets were gathered from resources such as local tax and real estate records, local public works and utilities department infrastructure records, Census data, and GIS databases. Based on the analysis of this information, the Plan describes vulnerability in terms of the types and numbers of existing buildings, infrastructure, critical facilities, population, and future development.

Estimating Potential Losses: Loss estimations for each hazard include the vulnerable population, structures and facilities, economic activity, and environmental resources that are exposed. Louisville Metro's degree of vulnerability depended upon the risk of a particular natural hazard occurring (including such factors as scope, frequency, intensity, and destructive potential).



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Following is a summary of the hazard type, ranges of years where data was collected, frequency of the event (if known), total losses to date, probability of the event, average consequences in dollar amounts, average annualized loss and lastly the hazard rank.

Hazard Type	Year Start Range	Year End Range	Range	Frequency	Total Losses	Probability	Average Consequences	Average Annualized Loss	Risk
Dam Failure	0	0	0	0	\$0	0.00	\$0	\$0	Severe
Flooding	1964	2010	46	41	\$208,298,243	0.89	\$5,080,445	\$4,528,223	Severe
Severe Storm	1957	2010	53	169	\$15,123,690	3.19	\$89,489	\$285,353	Severe
Severe Winter Storm	1960	2010	50	47	\$11,623,778	0.94	\$247,314	\$232,476	Severe
Tornado	1960	2010	50	14	\$15,000,384	0.28	\$1,071,456	\$300,008	Severe
HAZ/MAT	1986	2010	24	999	\$0	41.63	\$0	\$0	Severe
Hail	1961	2010	49	46	\$27,884,579	0.94	\$606,187	\$569,073	High
Karst/Sinkhole *	0	0	0	451 *	\$0	0.00	\$0	\$0	High
Drought	1895	2010	115	29	\$0	0.25	\$0	\$0	Moderate
Earthquake	0	0	0	0	\$0	0.00	\$0	\$0	Moderate
Extreme Heat	1983	2010	27	11	\$9,027	0.41	\$821	\$334	Moderate
Landslide	1990	2010	20	7	\$98,851	0.35	\$14,122	\$4,943	Moderate
Wildfire	2000	2010	10	4	\$0	0.40	\$0	\$0	Moderate
TOTAL					\$256,921,700.00		\$6,743,683.00	\$5,495,145.00	

*Karst Frequency is based on Sinkhole occurrences

Mitigation Strategy: Based on the Risk Assessment, the Mitigation Strategy provides a proactive, community mitigation program of activities, projects and programs that will help local agencies, residents, and businesses to be better prepared to prevent and/or reduce losses from an identified hazard. The Mitigation Strategy was developed through a tier of meetings and coordination with the Advisory Committee. The Mitigation Strategy section reviews the problems and common issues in Louisville Metro and details how the Advisory Committee revised the community's goals and objectives by utilizing a multi-hazard approach. The Louisville Metro's Capability Assessment outlines state and local ordinances, statues and regulations, and reviews funding mechanisms.

Five-Year Mitigation Action Plan: The five-year Action Plan responds to the Risk Assessment with projects and activities to mitigate Louisville's natural and man-made hazards. The action plan outlines projects that allow Louisville Metro to make informed future land use and zoning decisions, design better infrastructure, and keep the public out of harm's way. Louisville Metro has been very successful to-date with mitigation activities, including regulatory and legislation actions.

The updated plan identifies and analyzes a comprehensive range of specific mitigation actions and projects for each hazard. As highlighted in the Plan, prior to analyzing and prioritizing the mitigation actions, the Advisory Committee sorted the identified mitigation actions according to the following groups: preventative, property protection, structural projects, natural resource protection, emergency services, and public information and awareness.



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The five-year action plan addresses all 13 identified hazards and includes how the actions will be implemented and administered, including the responsible department, existing and potential resources, and timeframe to complete for each action. For program funding, the mitigation measures in the Action Plan are cost effective, environmentally sound, and technically feasible and shovel-ready to submit for various grant programs for funding. The Advisory Committee is composed of staff from those community departments that will be implementing the majority of the plan's recommendations and represent the public at-large.

Two general categories were added to the five-year action plan that includes projects with multiple benefits for more than one hazard. A general category was created to encompass numerous projects that cover All Hazards. Another general category fits the Geological hazards for Earthquake, Karst/Sinkholes, and Landslide. These general categories merge several hazard actions into one project to allow one type of action to address multiple concerns where projects costs achieve the same benefit.

▶ All Hazards Category	21 projects
▶ Geological: Earthquake, Karst/Sinkholes, Landslide	2 projects
▶ Dam/Levee Failure	14 projects
▶ Drought	2 projects
▶ Earthquake	7 projects
▶ Extreme Heat	3 projects
▶ Flood	26 projects
▶ Haz-Mat	3 projects
▶ Karst/Sinkhole	7 projects
▶ Landslide	5 projects
▶ Wildfire	6 projects
▶ Wind/Storm Driven	7 projects
▶ Winter/Storm	<u>3 projects</u>

106 Projects

The Mitigation Strategy identifies mitigation actions for each hazard profiled. Examples of projects follow:

- Dam/Levee Failure: Develop a Local Dam Permitting Process - For dams that do not fit the state's definition of a dam; Adopt process in codes
- Drought: Develop Method for Collecting Data - Information on historic data, Estimates for losses, Dates of occurrences
- Earthquake: Outreach to Schools -Education in schools: K- 12 / colleges / universities, Emphasize take the information home. Use National Earth Science Education Standard for kindergarten – 12. Utilize JCPS & KY EQ drill as standard.
- Extreme Heat: Public Outreach & Education - Coordinate with non-traditional agencies
- Flood: LaClede Basin – Proposed flood control basin
- Hailstorm: Prepare for Special Needs At-Risk Groups During Disaster - Develop Special needs preparedness program and "Special needs registry"; Promote campaign to self-



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identify if special needs in household; Build a Special needs database to help plan for response activities and shelters and evacuation

- HAZ/MAT (man-made): Develop Public Education/ Training for Business Community - Encourage companies with chemicals to consider the effects of natural hazards on their stock of hazardous materials and negative impact on employees and/or public
- Karst/Sinkhole: Repairs to public lands and facilities – Parks; Government owned
- Landslide: Slope Stabilization- Determine best method for slope stabilization on Brinson Drive at land acquisition site; Perform assessment, develop strategy
- Severe Storm: Increase Awareness of Outages During an Event - Outbound calls from LG&E re: outages; Mapping on websites
- Severe Winter Storm: Expand Operation Snow & Transportation planning - Staggered release plan to ease traffic before snow storms, esp. downtown
- Tornado: Find Location and Build Tornado Shelters/Safe Rooms for Minors Lane Neighborhood - Minors Lane school is being opened for the community during severe storm warnings for 2 manufactured home parks
- Wildfires: Clean up of damaged trees

Plan Maintenance Procedures: The Plan describes the method and schedule of monitoring, evaluating, and updating the Mitigation Plan within a five-year cycle. To maintain the Plan, EMA, MSD, LOJIC, and the Advisory Committee agreed to continue their support and commitment through normal operations and quarterly meetings. As appropriate, the Plan also will be evaluated after a disaster, or after unexpected changes in land use or demographics.

Submitting the Plan for Approval: The Plan will be submitted to the State Hazard Mitigation Officer at Kentucky Division of Emergency Management and to FEMA Region IV. Metro Council will be required to adopt the Plan by Resolution once it is approvable by FEMA.

Visit Louisville Metro EMA's website <http://louisvilleky.gov/EMA/Multi-Hazards+Mitigation/> for detailed information on Louisville's Multi-Hazards.